

LISTING OF CLAIMS:

1. (Original) A method of producing an optical element comprising applying a paste containing at least one compound selected from lithium compounds, potassium compounds, rubidium compounds, cesium compounds, silver compounds, and thallium compounds, an organic resin, and an organic solvent to a glass substrate containing an alkali metal component as a glass component and then performing heat treatment at a temperature below the softening temperature of the glass substrate.

2. (Original) The method according to claim 1 wherein the glass substrate is made of a glass containing at least 2% by weight of alkali metal, calculated on an oxide basis, the glass being a silicate glass, borosilicate glass, phosphate glass, or fluorophosphate glass.

3. (Currently amended) An optical element produced by the method of claim 1 ~~or 2~~.

4. (Original) The optical element according to claim 3 which is a graded refractive index lens, a graded refractive index lens array, an optical waveguide, or a diffraction grating.

5. (Original) The optical element according to claim 4 which is a slab optical waveguide or a channel optical waveguide.

6. (New) An optical element produced by the method of claim 2.

7. (New) The optical element according to claim 6 which is a graded refractive index lens, a graded refractive index lens array, an optical waveguide, or a diffraction grating.

8. (New) The optical element according to claim 7 which is a slab optical waveguide or a channel optical waveguide.